

**INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM**

Property/District Name: Aurora Pulsed Radiation Simulatr Survey Number: PG:61-45

Project: Dismantling of Aurora Agency: F/Army

Site visit by MHT Staff: ☐ no ☒ yes Name L. Bowlin Date 2/95

Eligibility recommended ☒ Eligibility not recommended ☐

Criteria: ☒ A ☐ B ☒ C ☐ D Considerations: ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G ☐ None

Justification for decision: (Use continuation sheet if necessary and attach map)

Located in Building 500 at the Army Research Laboratory (ARL) in Adelphi, the Army has determined that the Aurora Pulsed Radiation Simulator (Aurora) is exceptionally significant for its association with the Cold War (1946-1989) and for its unique engineering qualities of its construction that reflect high technology research and development during the Cold War. Nuclear survivability was a key issue in military strategy during the Cold War. When a nuclear bomb explodes, the gamma rays and electromagnetic pulses impact all electrical equipment. The Aurora was developed to determine how military electrical hardware like satellites and strategic missile systems would react to the radiation. Aurora tests the effects of x-rays and gamma rays produced by thermonuclear blasts which allowed the Army to develop defense systems capable of surviving the radiation. Designed and developed in the late 1960s and early 70s, Aurora has been operating continuously since 1972. The Army also believes that the scientific equipment is "an exceptional example of engineering design and construction, a feat that the Soviets were unable to duplicate due to the inability to fabricate certain key components critical to the operation of the simulator." The Army's determination was developed by Joseph Murphey, an architect who specializes in the evaluation of Cold War material culture for the Army and Air Force. The Trust has concurred with the Army's determination.

Aurora is the historic property. Building 500 is a non-descript concrete building constructed to shelter the simulator. It is not historic.

Documentation on the property/district is presented in: survey vertical files AND COMPLIANCE FILE "AURORA"

Prepared by: Joseph Murphey, AIA, Fort Worth COE District, and Army Research Laboratory

Lauren Bowlin
Reviewer, Office of Preservation Services

11/1/95
Date

NR program concurrence: ☒ yes ☐ no ☐ not applicable

Quanta R. R. R.
Reviewer, NR program

11-1-95
Date

2007

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

<input type="checkbox"/>	Eastern Shore	(all Eastern Shore counties, and Cecil)
<input checked="" type="checkbox"/>	Western Shore	(Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
<input type="checkbox"/>	Piedmont	(Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
<input type="checkbox"/>	Western Maryland	(Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

<input type="checkbox"/>	Paleo-Indian	10000-7500 B.C.
<input type="checkbox"/>	Early Archaic	7500-6000 B.C.
<input type="checkbox"/>	Middle Archaic	6000-4000 B.C.
<input type="checkbox"/>	Late Archaic	4000-2000 B.C.
<input type="checkbox"/>	Early Woodland	2000-500 B.C.
<input type="checkbox"/>	Middle Woodland	500 B.C. - A.D. 900
<input type="checkbox"/>	Late Woodland/Archaic	A.D. 900-1600
<input type="checkbox"/>	Contact and Settlement	A.D. 1570-1750
<input type="checkbox"/>	Rural Agrarian Intensification	A.D. 1680-1815
<input type="checkbox"/>	Agricultural-Industrial Transition	A.D. 1815-1870
<input type="checkbox"/>	Industrial/Urban Dominance	A.D. 1870-1930
<input checked="" type="checkbox"/>	Modern Period	A.D. 1930-Present
<input type="checkbox"/>	Unknown Period (<input type="checkbox"/> prehistoric <input type="checkbox"/> historic)	

III. Prehistoric Period Themes:

<input type="checkbox"/>	Subsistence
<input type="checkbox"/>	Settlement
<input type="checkbox"/>	Political
<input type="checkbox"/>	Demographic
<input type="checkbox"/>	Religion
<input type="checkbox"/>	Technology
<input type="checkbox"/>	Environmental Adaptation

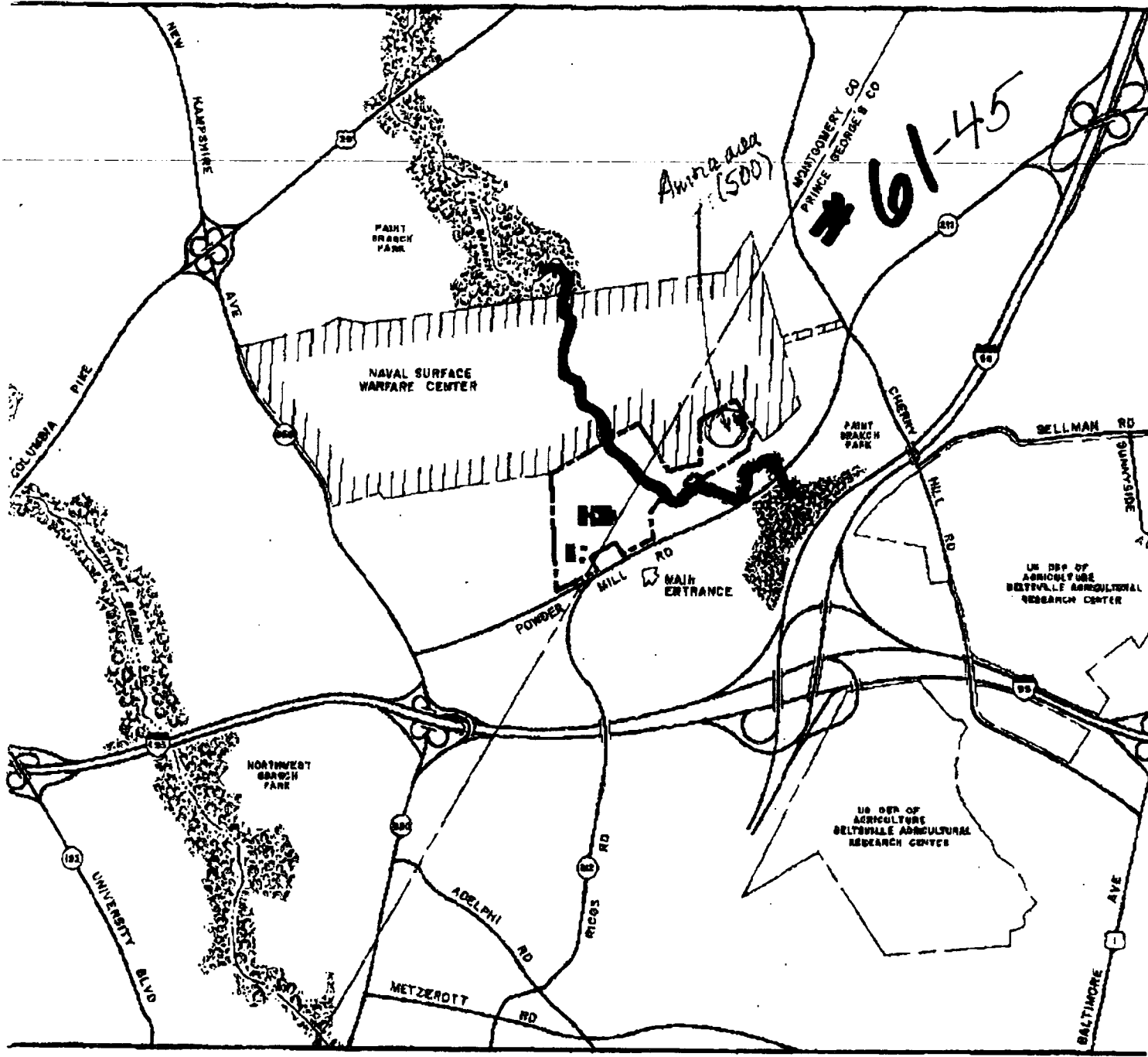
IV. Historic Period Themes:

<input type="checkbox"/>	Agriculture
<input type="checkbox"/>	Architecture, Landscape Architecture, and Community Planning
<input type="checkbox"/>	Economic (Commercial and Industrial)
<input type="checkbox"/>	Government/Law
<input checked="" type="checkbox"/>	Military
<input type="checkbox"/>	Religion
<input type="checkbox"/>	Social/Educational/Cultural
<input type="checkbox"/>	Transportation

V. Resource Type:

Category: structurHistoric Environment: urbanHistoric Function(s) and Use(s): military technology/radiation simulator

Known Design Source: _____



Beltsville Quad.

PG: 61 45

PG:61-45

Aurora Pulsed Radiation Simulator

Building 500, Army Research Laboratory, Adelphi

Beltsville Quadrangle

